

# Work Order ID 76893

November-23-11 11:08:47 AM

**\*76893\***

Page 1

Item ID: D4131-045

Accept

**\*N900040100\***

Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: Base Assembly

Start Date: 11/23/11 Start Qty: 2.00

**\*2\***

Cust Item ID:

Required Date: 11/23/11 Req'd Qty: 2.00

**\*2\***

Customer:

Reference: ECN11-639

*W Rework*

Run Start **\*NR1\***

Approvals: Process Plan:

Date:

Tooling:

Date:

Stop **\*NR2\***

QC:

Date:

SPC (Y/N):

Date:

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID Tool # Plan Code Accept Qty Reject Qty Reject Number Insp. Stamp

Draw Nbr

Revision Nbr

D4131

B

0.00

140

**\*140\***

Small Fab

Memo

0.00

Small Fab

PULL FROM STOCK:  
2 X D4131-3 B72469  
INSTALL LABEL PLATE AS PER DWG  
REV.B

*SB 12/02/15 (2)*

150

QCS- Inspect part completeness to step on W/O

0.00

**\*150\***

QC

Memo

0.00

Quality Control

*SB 12/02/15 (2)*

160

Identify as per dwg & Stock Location: *131*

0.00

**\*160\***

Packaging

Memo

0.00

Packaging

RE-IDENTIFY AS D4131-045  
USING NEW B/N

*12/2/10 SB (2)*

**Work Order ID 76893****\*76893\***

Page 2

November-23-11 11:08:47 AM

Item ID: D4131-045

Accept

**\*N900040100\***Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: Base Assembly

Start Date: 11/23/11 Start Qty: 2.00 **\*2\***

Cust Item ID:

Required Date: 11/23/11 Req'd Qty: 2.00 **\*2\***

Customer:

Reference: ECN11-639

Approvals: Process Plan: Date:

Tooling: Date:

Run Start **\*NR1\***

QC: Date:

SPC (Y/N): Date:

Stop **\*NR2\***Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
---------	--------	-----------	------------	------------	---------------	-------------

170

QC21- Final Inspection - Work Order Release

0.00

**\*170\***

QC

Memo

0.00

Quality Control

12/2/17 JF

MF 12-02-16

# Picklist Print

November-23-11 11:10:11 AM

Page 1

Work Order ID: 76893

Parent Item: D4131-045

Parent Item Name: Base Assembly

Start Date: 11/23/11

Required Date: 11/23/11

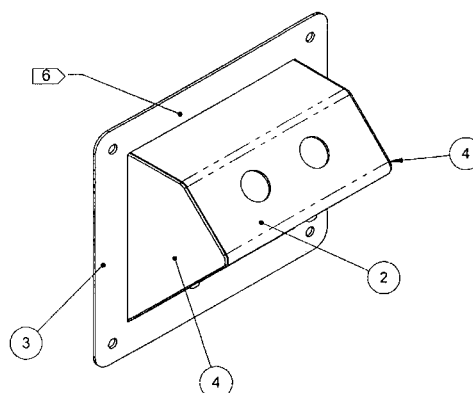
Start Qty: 2.00

Required Qty: 2.00

Comments: IPP Rev:A 11.09.26 new issue DD ver:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D4131-3 Base		Manufactured	No				Each	2.0000		2		11/2/15	
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				ST131		2				2			
				72469		2							
D4131-9 Label Plate		Manufactured	No			140	Each	63.0000	1	2		11/2/15	
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				GA		63				2			
				74258		3							
				74267		24							
				75067		36							
MS20615-3M3 RIVET		Purchased	No			140	Each	100.0000	2	4		11/2/15	
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				ST323		100				4			
				119108		100							

ITEM	QTY -041	PART NUMBER	DESCRIPTION
1	X	D4131-041	MANIFOLD ASSEMBLY
2	1	D4131-045	BASE ASSEMBLY
3	1	D4131-1	FRONT PLATE
4	2	D4131-5	SIDE PLATE



**D4131-041 MANIFOLD ASSEMBLY**

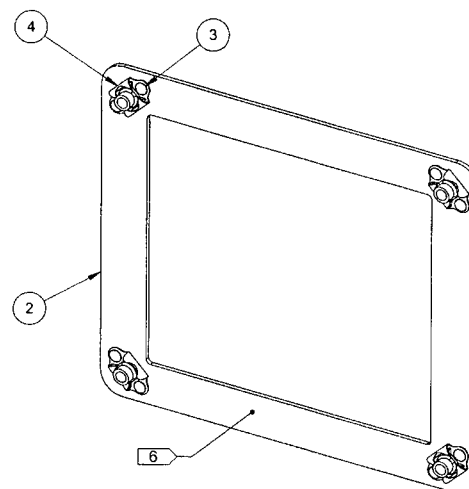
**NOTES:**

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: PER QSI 044 6.1
- 7) WEIGHT: 0.66 lbs

B	D4131-045 WAS D4131-3 (ZN D3-1); ADD 4131-045 (ZN B4-3); ADD Ø0.098 (ZN B4-7); ADD 4131-9 (ZN B5-10)	RF	11.07.27
A	NEW ISSUE	RF	10.09.16
REV.	DESCRIPTION	BY	DATE
DESIGN	RF	<b>DART AEROSPACE USA, INC.</b> KENT, WA	
DRAWN	RF		
CHECKED	MP	DRAWING NO.	REV. B
MFG. APPR.	SS	D4131	SHEET 1 OF 10
APPROVED	MP	TITLE	SCALE
DE APPR.	TH	MANIFOLD ASSEMBLY	NTS
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**RELEASED**  
2011-09-21  
W/P 76843

ITEM	QTY -043	PART NUMBER	DESCRIPTION
1	X	D4131-043	DOUBLER ASSEMBLY
2	1	D4131-7	DOUBLER
3	8	MS20426AD3-3	RIVET
4	4	MS21069L3	NUT PLATE



**D4131-043 DOUBLER ASSEMBLY**

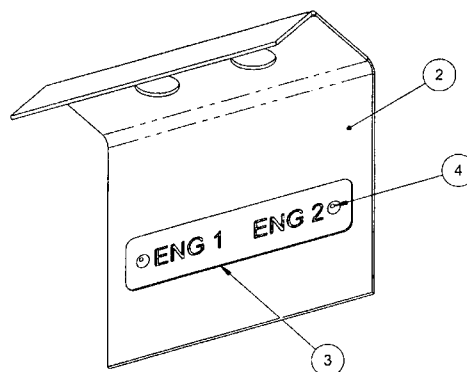
**NOTES:**

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: PER QSI 044 6.1
- 7) WEIGHT: 0.07 lbs

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2011-09-21  
AM

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MFG. APPR.	<i>MP</i>	D4131	SHEET 2 OF 10
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ITEM	QTY -045	PART NUMBER	DESCRIPTION
1	X	D4131-045	BASE ASSEMBLY
2	1	D4131-3	BASE
3	1	D4131-9	LABEL PLATE
4	2	MS20615-3M3	RIVET



**D4131-045 BASE ASSEMBLY**

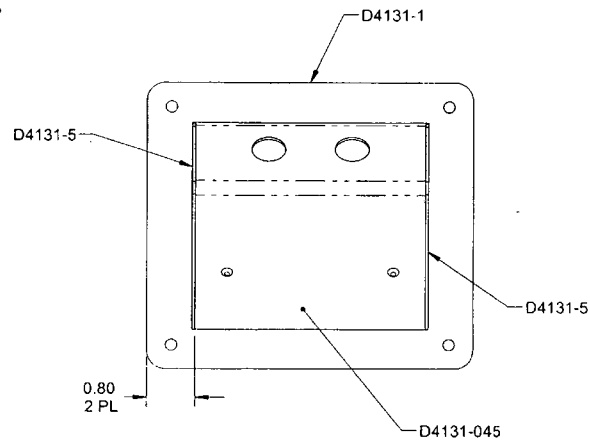
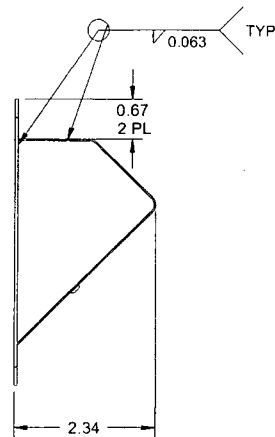


**RELEASED**  
2011-09-21

**NOTES:**

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.35 lbs

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CHECKED	<i>[Signature]</i>	DRAWING NO. <b>D4131</b>	REV. B
MFG. APPR.	<i>[Signature]</i>	SHEET 3 OF 10	
APPROVED	<i>[Signature]</i>	TITLE <b>MANIFOLD ASSEMBLY</b>	SCALE NTS
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DATE	11.07.27		



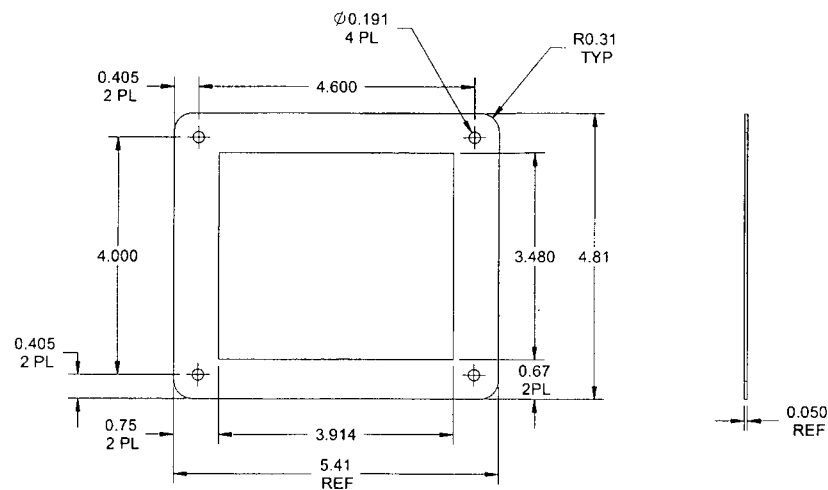
# D4131-041 MANIFOLD ASSEMBLY

## NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: PER QSI 044 6.1
- 7) WEIGHT: 0.66 lbs
- 8) WELD PER DART QSI 004

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AM

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MFG. APPR.	<i>MP</i>	<b>D4131</b>	SHEET 4 OF 10
APPROVED	<i>MP</i>	TITLE	SCALE
DE APPR.	<i>MP</i>	<b>MANIFOLD ASSEMBLY</b>	NTS
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**D4131-1 FRONT PLATE**

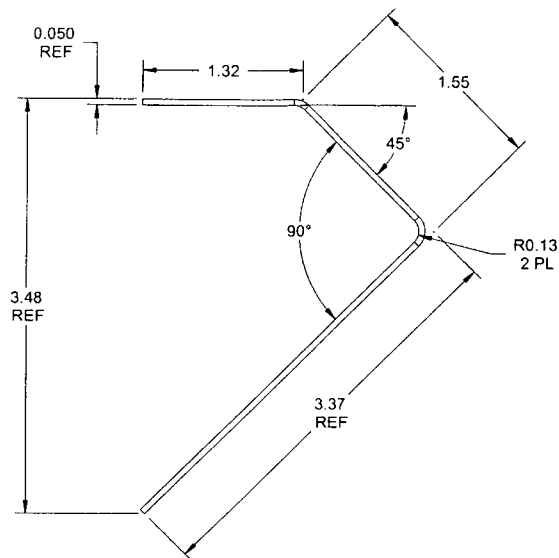
**NOTES:**

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL ANNEALED 2B FINISH 0.050 (18 GAUGE) SHEET  
PER MIL-S-5059  
OR AMS 5513 (304)  
OR AMS 5524 (316)  
OR ASTM A240  
OR ASME SA240  
PER DART SPEC. M304S18GA
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.18 lbs

DESIGN	RF	<b>DART AEROSPACE USA, INC.</b>	
DRAWN	RF	KENT, WA	
CHECKED	<i>MP</i>	DRAWING NO.	REV. B
MFG. APPR.	<i>MP</i>	<b>D4131</b>	SHEET 5 OF 10
APPROVED	<i>MP</i>	TITLE	SCALE
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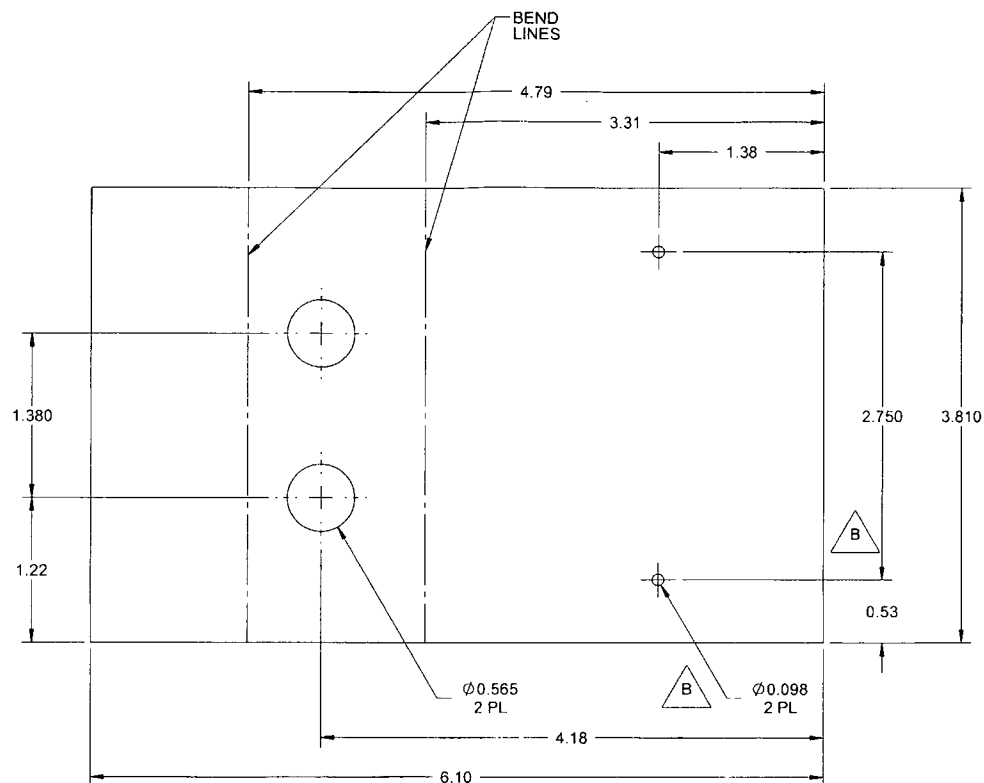
**D4131-3 BASE**  
MAKE FROM D4131-3F FLAT PATTERN

**RELEASED**  
2011-09-21  
WM

**NOTES:**

- 1) MATERIAL: MAKE FROM D4131-3F FLAT PATTERN
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.33 lbs

DESIGN	RF	<b>DART AEROSPACE USA, INC.</b>	
DRAWN	RF	KENT, WA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. B
MFG. APPR.	<i>[Signature]</i>	<b>D4131</b>	SHEET 6 OF 10
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	<b>MANIFOLD ASSEMBLY</b>	NTS
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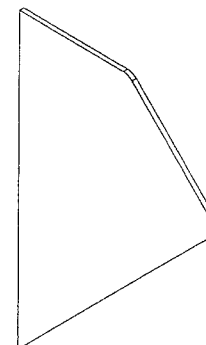
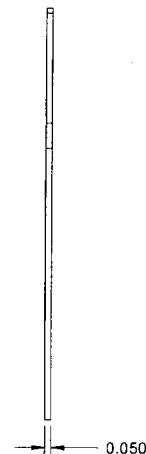
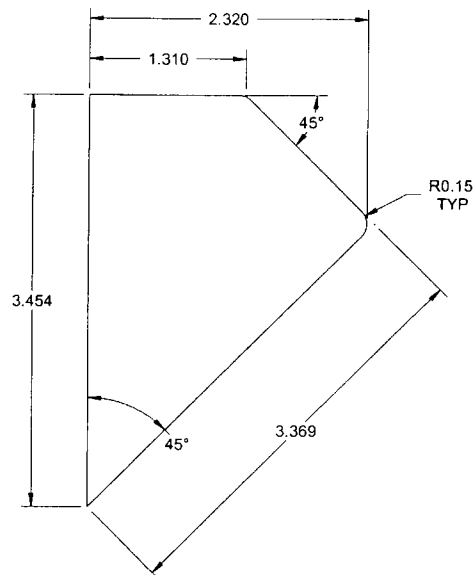
**D4131-3F FLAT PATTERN**

**NOTES:**

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL ANNEALED 2B FINISH 0.050 (18 GAUGE) SHEET  
PER MIL-S-5059  
OR AMS 5513 (304)  
OR AMS 5524 (316)  
OR ASTM A240  
OR ASME SA240  
PER DART SPEC. M304S18GA
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.33 lbs

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2011-09-21

DESIGN	RF	<b>DART AEROSPACE USA, INC.</b>	
DRAWN	RF	KENT, WA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. B
MFG. APPR.	<i>[Signature]</i>	<b>D4131</b>	SHEET 7 OF 10
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	<b>MANIFOLD ASSEMBLY</b>	NTS
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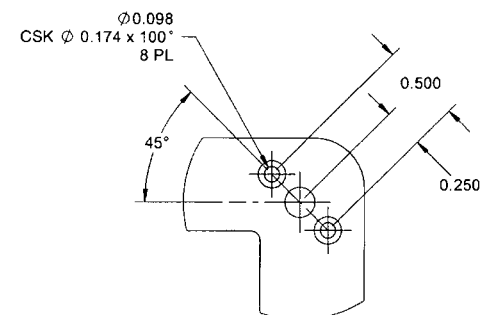
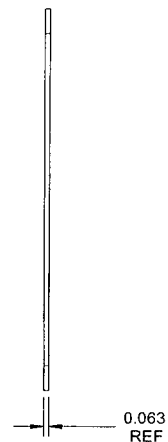
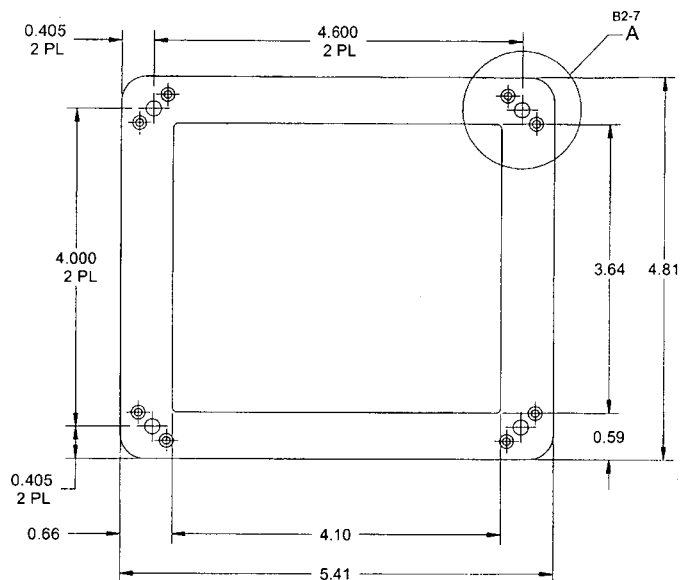
**D4131-5 SIDE PLATE**

**RELEASED**  
2011-09-21  
MND

**NOTES:**

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL ANNEALED 2B FINISH 0.050 (18 GAUGE) SHEET  
PER MIL-S-5059  
OR AMS 5513 (304)  
OR AMS 5524 (316)  
OR ASTM A240  
OR ASME SA240  
PER DART SPEC. M304S18GA
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.07 lbs

DESIGN	RF	<b>DART AEROSPACE USA, INC.</b>	
DRAWN	RF	KENT, WA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. B
MFG. APPR.	<i>[Signature]</i>	<b>D4131</b>	SHEET 8 OF 10
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	<b>MANIFOLD ASSEMBLY</b>	NTS
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**DETAIL A** D5-7  
TYPICAL

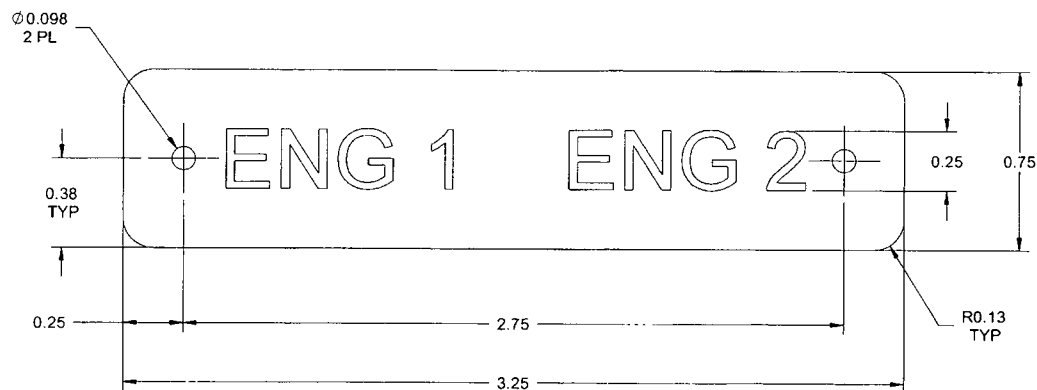
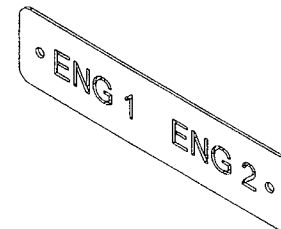
**D4131-7 PLATE**

**NOTES:**

- 1) MATERIAL: 6061-T6/T62 ALUMINUM SHEET 0.063 THICK  
PER QQ-A-250/11 OR AMS-QQ-A-250/11  
OR AMS 4025 OR AMS4027  
OR ASTM B209  
PER DART SPEC. M6061T6S0.063
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.07 lbs

**RELEASED**  
2011-09-21  
JW

DESIGN	RF	<b>DART AEROSPACE USA, INC.</b>	
DRAWN	RF	KENT, WA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. B
MFG. APPR.	<i>[Signature]</i>	<b>D4131</b>	SHEET 9 OF 10
APPROVED	<i>[Signature]</i>	TITLE	SCALE
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# **D4131-9 LABEL PLATE**

**RELEASED**  
2011-09-21  
MM

## **NOTES:**

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL ANNEALED 2B FINISH 0.030 (22 GAUGE) SHEET  
PER MIL-S-5059  
OR AMS 5513 (304)  
OR AMS 5524 (316)  
OR ASTM A240  
OR ASME SA240  
PER DART SPEC. M304S22GA
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.02 lbs

DESIGN	RF	<b>DART AEROSPACE USA, INC.</b>	
DRAWN	RF	KENT, WA	
CHECKED	MM	DRAWING NO.	REV. B
MFG. APPR.	DS	<b>D4131</b>	SHEET 10 OF 10
APPROVED	MM	TITLE	SCALE
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